

- 17 -

## **PACKAGES FOR SEMICONDUCTOR DIE**

### **Abstract**

A ball grid array assembly includes a package cover that encapsulates a die and a portion of a substrate to which the die is attached, including an edge of the substrate.

- 5 Encapsulation of the substrate edge by the cover reduces penetration of moisture or other contaminants into the substrate. The cover includes a rib that extends to contact a circuit board to which the ball grid array assembly is connected. With such a rib, planarity between the circuit board and the substrate is maintained during soldering.